



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-0824; Directorate Identifier 2013-NM-191-AD; Amendment 39-18378; AD 2016-01-18]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 98-20-27 for all Airbus Model A300 B4-600, B4-600R, and F4-600R series airplanes, and Model A300 C4-605R Variant F airplanes (collectively called Model A300-600 series airplanes). AD 98-20-27 required repetitive inspections to detect fatigue cracking of the wing top skin at the front spar joint; and a follow-on eddy current inspection and repair, if necessary. This new AD reduces the inspection compliance time and intervals, and expands the inspection area of the wing top skin at the front spar joint. This AD was prompted by reports of cracking of the wing top skin in an area not required for inspection by AD 98-20-27. We are issuing this AD to detect and correct fatigue cracking of the wing top skin at the front spar joint; such fatigue cracking could result in reduced structural integrity of the airplane.

DATES: This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of October 29, 1998 (63 FR 50981, September 24, 1998).

ADDRESSES: You may examine the AD docket on the Internet at <http://www.regulations.gov/#!docketDetail;D=FAA-2015-0824>; or in person at the Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

For service information identified in this AD, contact Airbus SAS, Airworthiness Office – EAW, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airworth-eas@airbus.com; Internet <http://www.airbus.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-0824.

FOR FURTHER INFORMATION CONTACT: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-2125; fax 425-227-1149.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 98-20-27, Amendment 39-10793 (63 FR 50981, September 24, 1998). AD 98-20-27 applied to all Airbus Model A300 B4-600, B4-600R, and F4-600R series airplanes, and Model A300 C4-605R Variant F airplanes (collectively called Model A300-600 series airplanes). The NPRM published in the Federal Register on April 14, 2015 (80 FR 19892). The NPRM was prompted by reports of cracking of the wing top skin in an area not required for inspection by AD 98-20-27. The NPRM proposed to continue to require repetitive inspections to detect fatigue cracking of the wing top skin at the front spar joint; and a follow-on eddy current inspection and repair, if necessary. The NPRM also proposed to reduce the inspection compliance time and intervals, and expand the inspection area of the wing top skin at the front spar joint. We are issuing this AD to detect and correct fatigue cracking of the wing top skin at the front spar joint; such fatigue cracking could result in reduced structural integrity of the airplane.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2013-0232R1, dated October 2, 2013 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition.

The MCAI states:

During full-scale fatigue testing conducted in the early 1990's, cracks were found on the top skin of the wing between Ribs 1 and 7, starting at the front spar fastener holes.

This condition, if not detected and corrected, could adversely affect the structural integrity of the wing.

Consequently, Airbus issued Service Bulletin (SB) A300-57-6045 and DGAC [Direction Générale de l'Aviation Civile] France issued AD 97-374-238 [http://ad.easa.europa.eu/blob/19973740tb_superseded.pdf/AD_F-1997-374-238_2] for A300-600 aeroplanes and AD 1999-008-020 [http://ad.easa.europa.eu/blob/19980080tb_superseded.pdf/AD_F-1999-008-020_2] for A300-600ST aeroplanes to require repetitive detailed inspections of the wing top skin and, in case of findings, an Eddy Current (EC) inspection, and, depending on the size of the cracks, repair.

After those [DGAC] ADs were issued, further cracks to the wing top skin were reported by operators, within an area not covered by the existing [DGAC] ADs. To address this potential unsafe condition, Airbus revised SB A300-57-6045 to extend the area to be inspected.

In addition, a fleet survey and updated Fatigue and Damage Tolerance analyses were performed in order to substantiate the second A300-600 Extended Service Goal (ESG2) exercise. The results of these analyses have determined that the inspection thresholds and intervals must be reduced to allow timely detection of these cracks and the accomplishment of applicable corrective action(s).

As the ESG2 exercise is only applicable to A300-600 aeroplanes, A300-600ST aeroplanes are now addressed through new Airbus SB A300-57-9026.

For the reasons described above, this [EASA] AD retains the requirements of DGAC France AD 97-374-238(B) [http://ad.easa.europa.eu/blob/19973740tb_superseded.pdf/AD_F-1997-374-238_2] [which corresponds to FAA

AD 98-20-27, Amendment 39-10793 (63 FR 50981, September 24, 1998)] and [DGAC] AD 1999-008-020(B) [http://ad.easa.europa.eu/blob/19980080tb_superseded.pdf/AD_F-1999-008-020_2], which are superseded, but requires those actions, for A300-600 aeroplanes only, within reduced thresholds and intervals.

* * * * *

You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov/#!documentDetail;D=FAA-2015-0824-0003>.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM (80 FR 19892, April 14, 2015) and the FAA's response to each comment.

Support for the NPRM (80 FR 19892, April 14, 2015)

United Parcel Service (UPS) stated that the proposed changes maintain the fleet airworthiness using the service experience and current certification maintenance programs for all airplanes in service.

Request to Extend the Repetitive Inspection Interval

UPS requested that we extend the interval for the repetitive inspections proposed in paragraph (j)(2) of the proposed AD (80 FR 19892, April 14, 2015). UPS stated that its Model A300 fleet and associated maintenance program is not certified to the ESG-2 limitations; therefore, the repetitive inspection interval should be based on the airplane certification design service goal (DSG). UPS explained that the repetitive interval extension request is due to the additional 12,000-flight-cycle service life to ensure any crack development is detected after an airplane operates beyond the 30,000-flight-cycle

DSG. UPS stated that, with an extension of airplane operational life, more frequent inspections would be necessary for airplanes operating beyond the original DSG that are not necessary for an airplane operating to the airplane DSG values.

We disagree with UPS's request. UPS did not provide any data to substantiate that the changed compliance time for the repetitive inspection interval provides an equivalent level of safety. Under the provisions of paragraph (o)(1) of this AD, we will consider requests for approval of an alternative method of compliance (AMOC) if sufficient data are submitted to substantiate that a revised inspection interval would provide an equivalent level of safety. We have not changed this AD in this regard.

Request to Include Corrective Actions for Repetitive Inspections

UPS requested that we correct the inadvertent omission of the corrective actions for the repetitive inspections in paragraph (j) of the proposed AD (80 FR 19892, April 14, 2015) by including a reference to paragraph (j) of the proposed AD in paragraphs (k)(1) and (k)(2) of the proposed AD, which specify the corrective actions.

We agree with UPS to correct the inadvertent omission. We have revised paragraphs (k)(1) and (k)(2) of this AD accordingly.

Conclusion

We reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these changes:

- Are consistent with the intent that was proposed in the NPRM (80 FR 19892, April 14, 2015) for correcting the unsafe condition; and

- Do not add any additional burden upon the public than was already proposed in the NPRM (80 FR 19892, April 14, 2015).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Related Service Information under 1 CFR part 51

Airbus has issued Service Bulletin A300-57-6045, Revision 10, dated November 13, 2013. The service information describes inspection procedures for fatigue cracking of the wing top skin at the front spar joint between ribs 1 and 7. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 130 airplanes of U.S. registry.

The actions that are required by AD 98-20-27, Amendment 39-10793 (63 FR 50981, September 24, 1998), and retained in this AD take about 2 work-hours per product, at an average labor rate of \$85 per work-hour. Based on these figures, the estimated cost of the actions that are required by AD 98-20-27 is \$170 per product.

We also estimate that it will take about 2 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$22,100, or \$170 per product.

We have received no definitive data that will enable us to provide cost estimates for the on-condition actions specified in this AD.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a "significant regulatory action" under Executive Order 12866;

2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);

3. Will not affect intrastate aviation in Alaska; and

4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov/#!docketDetail;D=FAA-2015-0824>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the ADDRESSES section.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive

(AD) 98-20-27, Amendment 39-10793 (63 FR 50981, September 24, 1998), and adding the following new AD:

2016-01-18 Airbus: Amendment 39-18378. Docket No. FAA-2015-0824; Directorate Identifier 2013-NM-191-AD.

(a) Effective Date

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 98-20-27, Amendment 39-10793 (63 FR 50981, September 24, 1998).

(c) Applicability

This AD applies to the Airbus airplanes, certificated in any category, identified in paragraphs (c)(1) through (c)(4) of this AD, all manufacturer serial numbers.

- (1) Airbus Model A300 B4-601, B4-603, B4-620, and B4-622 airplanes.
- (2) Airbus Model A300 B4-605R and B4-622R airplanes.
- (3) Airbus Model A300 F4-605R and F4-622R airplanes.
- (4) Airbus Model A300 C4-605R Variant F airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 57, Wings.

(e) Reason

This AD was prompted by reports of cracking of wing top skin in an area not required for inspection by AD 98-20-27, Amendment 39-10793 (63 FR 50981,

September 24, 1998). We are issuing this AD to detect and correct fatigue cracking of the wing top skin at the front spar joint; such fatigue cracking could result in reduced structural integrity of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Retained Repetitive Inspections, with Revised Service Information

This paragraph restates the requirements of paragraph (a) of AD 98-20-27, Amendment 39-10793 (63 FR 50981, September 24, 1998), with revised service information. Prior to the accumulation of 22,000 total flight cycles, or within 2,000 flight cycles after October 29, 1998 (the effective date of AD 98-20-27), whichever occurs later: Perform a detailed visual inspection to detect fatigue cracking of the wing top skin at the front spar joint, in accordance with Airbus Service Bulletin A300-57-6045, Revision 1, dated August 3, 1994, including Appendix 1, Revision 1, dated August 3, 1994; Airbus Service Bulletin A300-57-6045, Revision 02, dated April 21, 1998, including Appendix 1, Revision 02, dated April 21, 1998; or Airbus Service Bulletin A300-57-6045, Revision 10, dated November 13, 2013. Repeat the detailed visual inspection thereafter at intervals not to exceed 8,000 flight cycles.

(h) Retained Inspection and Repair, with Revised Service Information

This paragraph restates the requirements of paragraph (b) of AD 98-20-27, Amendment 39-10793 (63 FR 50981, September 24, 1998), with revised service information. If any cracking is suspected or detected during any inspection required by paragraph (g) of this AD: Prior to further flight, perform an eddy current inspection to

confirm the findings of the visual inspection, in accordance with Airbus Service Bulletin A300-57-6045, Revision 1, dated August 3, 1994, including Appendix 1, Revision 1, dated August 3, 1994; Airbus Service Bulletin A300-57-6045, Revision 02, dated April 21, 1998, including Appendix 1, Revision 02, dated April 21, 1998; or Airbus Service Bulletin A300-57-6045, Revision 10, dated November 13, 2013. If any cracking is detected during any eddy current inspection, prior to further flight, repair using a method approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate; or the Direction Générale de l'Aviation Civile (or its delegated agent).

(i) New Requirement of this AD: Initial Inspection

At the applicable time specified in paragraph (i)(1) or (i)(2) of this AD: Do a detailed inspection of the wing top skin between ribs 1 and 7 for cracking, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-57-6045, Revision 10, dated November 13, 2013. Accomplishment of the initial inspection required by this paragraph terminates the requirements of paragraph (g) of this AD.

(1) For Model A300 B4-601, B4-603, B4-620, and B4-622 airplanes; Model A300 B4-605R and B4-622R airplanes; and Model A300 C4-605R Variant F airplanes: At the later of the times specified in paragraphs (i)(1)(i) and (i)(1)(ii) of this AD.

(i) Before the accumulation of 17,100 total flight cycles or 38,400 total flight hours, whichever occurs first.

(ii) Within 1,000 flight cycles or 2,200 flight hours, whichever occurs first after the effective date of this AD.

(2) For Model A300 F4-605R and F4-622R airplanes: At the later of the times specified in paragraphs (i)(2)(i) and (i)(2)(ii) of this AD.

(i) Before the accumulation of 22,000 total flight cycles or 49,500 total flight hours, whichever occurs first.

(ii) Within 1,300 flight cycles or 2,800 flight hours, whichever occurs first after the effective date of this AD.

(j) New Requirement of this AD: Repetitive Inspections

Repeat the inspection required by paragraph (i) of this AD thereafter at the applicable time and intervals specified in paragraphs (j)(1) and (j)(2) of this AD.

(1) For Model A300 B4-601, B4-603, B4-620, and B4-622 airplanes; Model A300 B4-605R and B4-622R airplanes; and Model A300 C4-605R Variant F airplanes: Repeat the inspection at the applicable time specified in paragraph (j)(1)(i) or (j)(1)(ii) of this AD.

(i) For airplanes that have an average flight time (AFT) that is equal to or more than one and one-half hours: Repeat the inspection at intervals not to exceed 5,100 flight cycles or 11,000 flight hours, whichever occurs first.

(ii) For airplanes that have an AFT that is less than one and one-half hours:

Repeat the inspection at intervals not to exceed 5,500 flight cycles or 8,300 flight hours, whichever occurs first.

(2) For Model A300 F4-605R and F4-622R airplanes: Repeat the inspection at the applicable time specified in paragraph (j)(2)(i) or (j)(2)(ii) of this AD.

(i) For airplanes that have an AFT that is equal to or more than one and one-half hours: Repeat the inspection at intervals not to exceed 6,500 flight cycles or 14,100 flight hours, whichever occurs first.

(ii) For airplanes that have an AFT that is less than one and one-half hours:

Repeat the inspection at intervals not to exceed 7,000 flight cycles or 10,600 flight hours, whichever occurs first.

(k) New Requirement of this AD: Repair of Cracking

(1) If any crack in the top skin in the area forward of the front spar attachment is found during any inspection required by paragraph (i) or (j) of this AD: Before further flight, repair using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA).

(2) If any crack or sign of a crack is found in the top skin at or aft of the spar attachment during any inspection required by paragraph (i) or (j) of this AD: Before further flight, do an eddy current inspection of the cracks or of the signs of cracking to confirm the findings of the detailed inspection, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-57-6045, Revision 10, dated

November 13, 2013. If there is any crack at or aft of the spar attachment, before further flight, repair using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; EASA; or Airbus's EASA DOA.

(l) No Terminating Action

Accomplishment of any repair required by paragraph (k) this AD does not constitute terminating action for the repetitive inspections required by paragraph (j) of this AD.

(m) No Reporting Required

Although Airbus Service Bulletin A300-57-6045, Revision 10, dated November 13, 2013, specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(n) Credit for Previous Actions

This paragraph provides credit for actions required by paragraphs (i), (j) and (k) of this AD, if those actions were performed before the effective date of this AD using the Airbus service bulletins specified in paragraphs (n)(1) through (n)(8) of this AD, which are not incorporated by reference in this AD.

- (1) Airbus Service Bulletin A300-57-6045, dated March 18, 1993.
- (2) Airbus Service Bulletin A300-57-6045, Revision 03, dated October 25, 1999.
- (3) Airbus Service Bulletin A300-57-6045, Revision 04, dated January 13, 2002.
- (4) Airbus Service Bulletin A300-57-6045, Revision 05, dated June 13, 2003.
- (5) Airbus Service Bulletin A300-57-6045, Revision 06, dated January 13, 2005.
- (6) Airbus Service Bulletin A300-57-6045, Revision 07, dated August 14, 2008.

(7) Airbus Service Bulletin A300-57-6045, Revision 08, dated June 6, 2011.

(8) Airbus Service Bulletin A300-57-6045, Revision 09, dated May 21, 2013.

(o) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-2125; fax 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov.

(i) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(ii) AMOCs approved previously for AD 98-20-27, Amendment 39-10793 (63 FR 50981, September 24, 1998), are approved as AMOCs for the corresponding provisions of this AD.

(2) Contacting the Manufacturer: As of the effective date of this AD, for any requirement in this AD to obtain corrective actions from a manufacturer, the action must

be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or EASA; or Airbus's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

(p) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2013-0232R1, dated October 2, 2013, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-0824.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (q)(5) and (q)(6) of this AD.

(q) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(3) The following service information was approved for IBR on [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]

(i) Airbus Service Bulletin A300-57-6045, Revision 10, dated November 13, 2013.

(ii) Reserved.

(4) The following service information was approved for IBR on October 29, 1998 (63 FR 50981, September 24, 1998).

(i) Airbus Service Bulletin A300-57-6045, Revision 1, dated August 3, 1994, including Appendix 1, Revision 1, dated August 3, 1994, which contains the following list of effective pages: Page numbers 1 through 10, Revision 1, dated August 3, 1994; Appendix 1, pages 1 and 2, Revision 1, dated August 3, 1994; and Appendix 1, pages 3 through 6, dated March 18, 1993.

(ii) Airbus Service Bulletin A300-57-6045, Revision 02, dated April 21, 1998, including Appendix 1, Revision 02, dated April 21, 1998.

(5) For service information identified in this AD, contact Airbus SAS, Airworthiness Office – EAW, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airworth-eas@airbus.com; Internet <http://www.airbus.com>.

(6) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(7) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.
Issued in Renton, Washington, on January 6, 2016.

Victor Wicklund,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2016-00611 Filed: 1/27/2016 8:45 am; Publication Date: 1/28/2016]